Response to Advisory Action dated February 3, 2004 &

Supplemental to Office Action dated October 7, 2003

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) Process for manufacturing a composite tape based on

reinforcing fibres and on a thermoplastic organic material, consisting in bringing together and

in consolidating a multiplicity of continuous yarns, characterized in that:

yarns based on thermoplastic and reinforcing fibres are entrained and brought together

in a parallel manner in the form of a sheet;

said sheet is made to enter a zone in which the sheet is heated to a temperature

reaching at least the melting point of the thermoplastic without reaching the softening

temperature of the reinforcing fibres;

the sheet is made to pass through a rotating impregnation device including heated

rollers having heating elements therein, while maintaining the sheet at a temperature at which

the thermoplastic is malleable, in order to distribute the molten thermoplastic uniformly and

guarantee that the reinforcing fibres are completely impregnated by the latter;

the sheet is introduced into a shaping and centring device including a roller in a shape

of a hyperboloid, while maintaining the sheet at a temperature at which the thermoplastic is

malleable, so as to obtain a tape formed by bringing the yarns together so as to be touching,

thereby creating transverse continuity;

the tape is cooled in order to consolidate the yarns by freezing the thermoplastic and

dimensional characteristics of the tape and appearance of the tape are set in order to deliver

said composite tape.

2. (Previously Presented) Process according to Claim1, characterized in that the

2

Application Serial No.: 09/668,291

Response to Advisory Action dated February 3, 2004 &

Supplemental to Office Action dated October 7, 2003

yarns that are brought together consist of continuous glass filaments and continuous

thermoplastic filaments which are co-mingled.

3. (Previously Presented) Process according to Claim 1, characterized in that it

consists in unreeling, from wound packages, a continuous yarn of reinforcing filaments and

thermoplastic filaments and, while the yarns are being brought together in the form of a sheet,

in regulating the tension in the yarns.

4. (Previously Presented) Process according to claim 1, characterized in that the

yarns are stripped of any static electricity before the sheet passes into the heating zone.

5. (Previously Presented) Process according to Claim 1, characterized in that the

sheet is introduced into an additional heating zone after it has passed through the rotating

impregnation device.

6. (Previously Presented) Process according to Claim 1, characterized in that, at the

end of the manufacturing line, the tape is wound up in the form of a reel for storing it.

7.-19. (Canceled)

20. (Currently Amended) A process for manufacturing a composite tape, said

process comprising the steps of:

entraining and bringing together a multiplicity of yarns based on thermoplastic

organic material and reinforcing fibres in a parallel manner to form a sheet;

heating the sheet by entering the sheet into a heating zone in which the sheet is heated

to a temperature of at least a melting point temperature of the thermoplastic and less than a

softening temperature of the reinforcing fibres;

passing the sheet through a rotating impregnation device including heated rollers

3

Response to Advisory Action dated February 3, 2004 &

Supplemental to Office Action dated October 7, 2003

having heating elements therein, while maintaining the sheet at a temperature at which the

thermoplastic is malleable, so as to ensure that molten thermoplastic is distributed uniformly

and guarantee that the reinforcing fibres are completely impregnated by the molten

thermoplastic;

bringing the multiplicity of yarns together so as to be touching using a shaping and

centering device including a roller in a shape of a hyperboloid, while maintaining the sheet at

a temperature at which the thermoplastic is malleable, so as to obtain a tape having transverse

continuity; and

cooling the tape in order to consolidate the multiplicity of yarns by freezing the

thermoplastic.

21. (Previously Presented) The process according to Claim 20, wherein the

multiplicity of yarns comprise continuous glass filaments and continuous thermoplastic

filaments that are co-mingled.

22. (Previously Presented) The process according to Claim 20, further comprising

the steps of unreeling a continuous yarn of reinforcing filaments and thermoplastic filaments;

and regulating tension in the continuous yarn while the multiplicity of yarns are being

brought together to form the sheet.

23. (Previously Presented) The process according to Claim 20, further comprising

stripping the multiplicity of yarns of static electricity before the sheet enters the heating zone.

24. (Previously Presented) The process according to Claim 20, further comprising

the step of introducing the sheet into a second heating zone after the sheet has passed through

the rotating impregnation device.

4

Application Serial No.: 09/668,291

Response to Advisory Action dated February 3, 2004 & Supplemental to Office Action dated October 7, 2003

25. (Previously Presented) The process according to Claim 20, further comprising the step of winding the composite tape in a form of a reel.

26. (Previously Presented) The process according to Claim 20, wherein said step of cooling the tape sets the dimensional and aesthetic characteristics of the composite tape.